

FISHERIES AND OCEANS CANADA / PECHES ET OCEANS CANADA



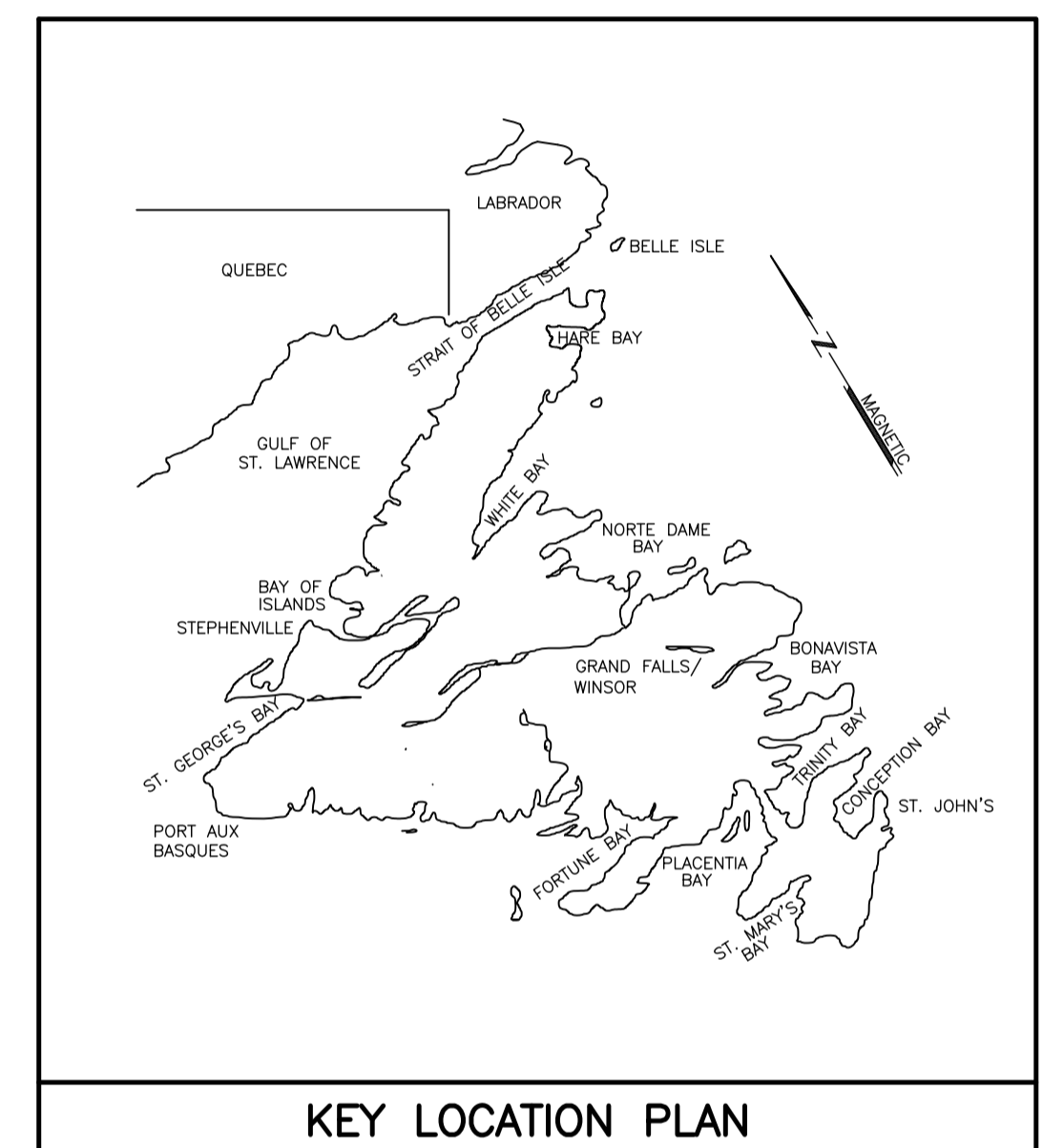
Canada

PROJECT TITLE NAFC P-18 SNORKEL HOOD EXTENSION

PROJECT NO : F6879-179230

ISSUED FOR TENDER

DATE: DEC 19.17



CLIENT/OWNER:

Fisheries and Oceans Canada
Pêches et Océans Canada
Real Property Services Immobiliers

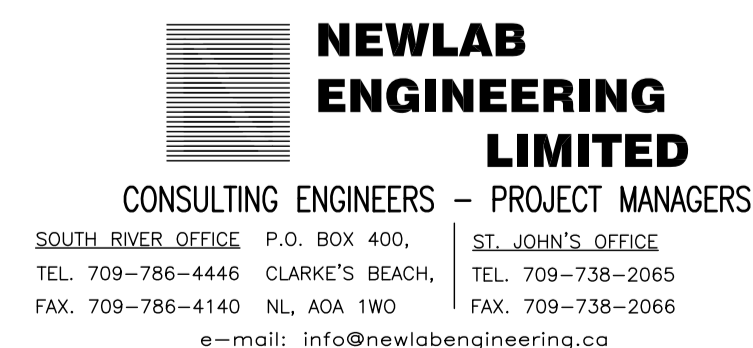
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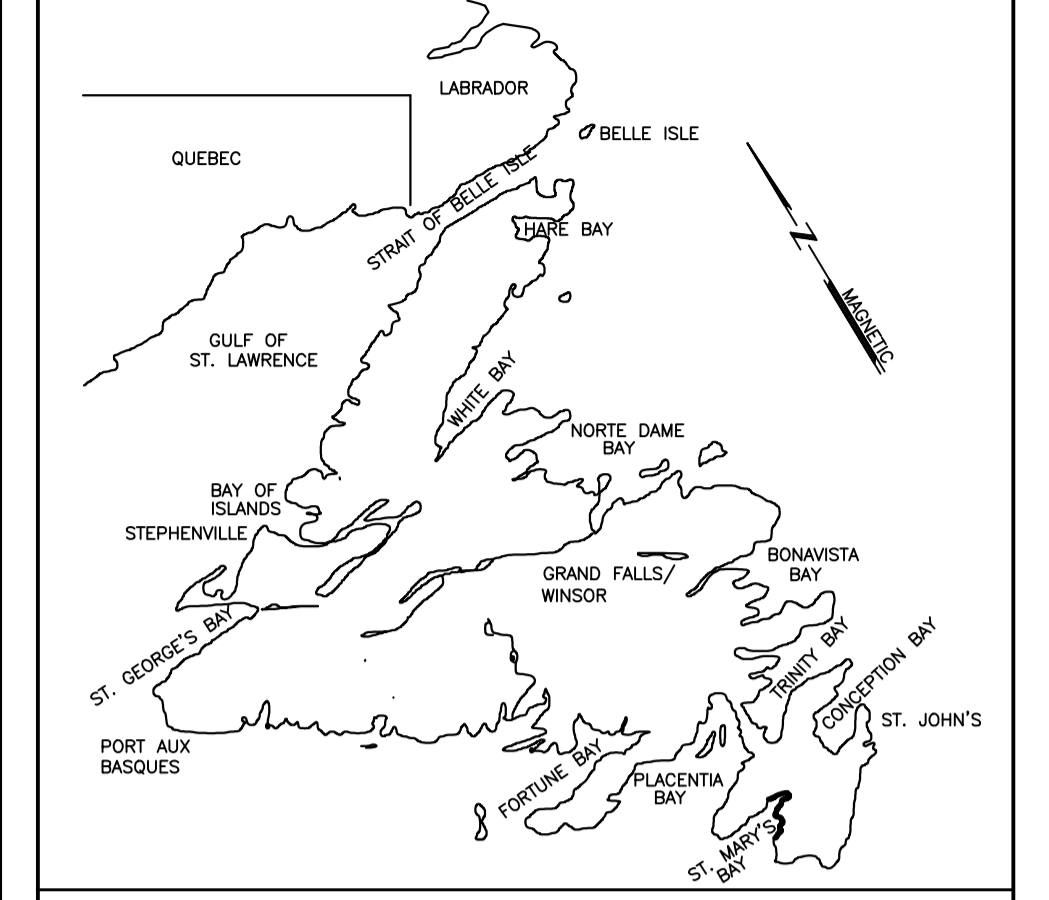
No.	TITLE
01N1009A090A01	PLANS AND DETAILS
01N1009A090H01	PART FLOOR PLANS – MECHANICAL LAYOUT
01N1009A090H02	MECHANICAL DETAILS
01N1009A090E01	PART FLOOR PLANS – ELECTRICAL AND MECHANICAL LAYOUTS

PRIME CONSULTANTS:



SUB CONSULTANTS:





KEY LOCATION PLAN

PRIME CONSULTANT CORE PROJECT #17-2730


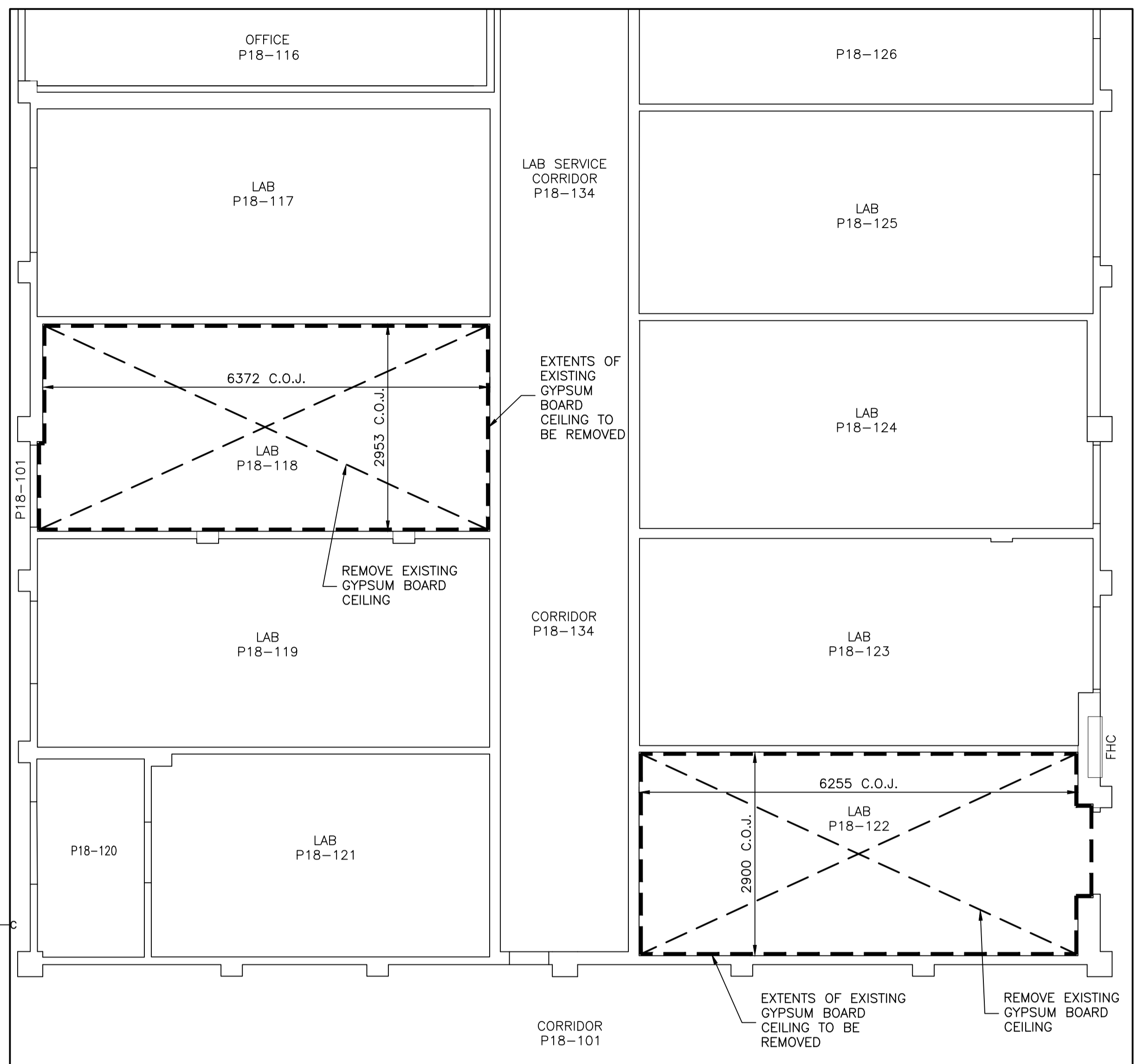
COREC ENGINEERING INC.
 MECHANICAL & ELECTRICAL CONSULTANT
 57 OFFICE PLACE ST. JOHN'S, NL, CANADA A1B 4H8 TEL: 709-738-0818 FAX: 709-738-0810

SUB CONSULTANT

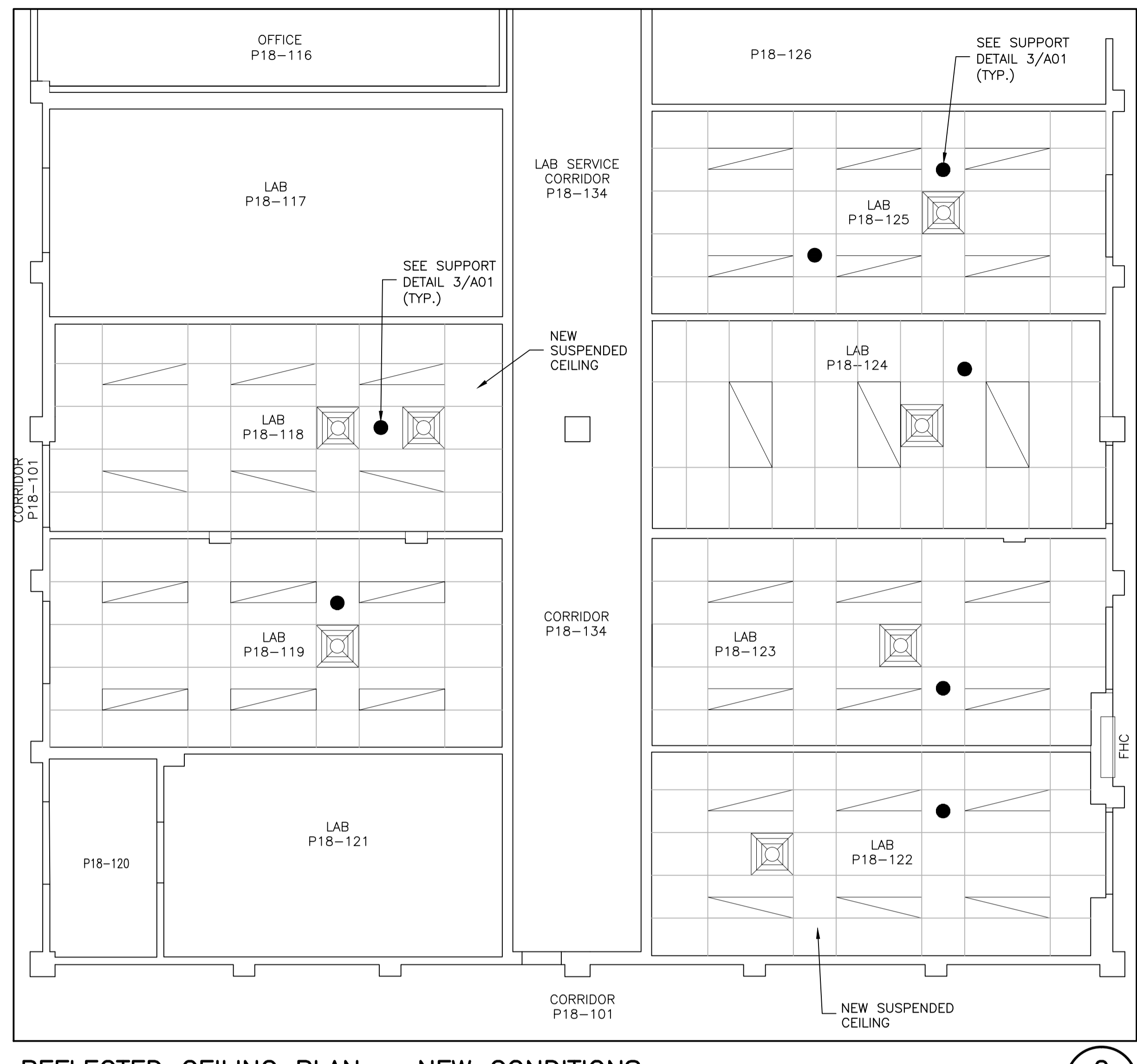
NEWLAB ENGINEERING LIMITED
 CONSULTING ENGINEERS - PROJECT MANAGERS
 SOUTH RIVER OFFICE P.O. BOX 400, ST. JOHN'S OFFICE
 TEL. 709-786-4446 CLARKE'S BEACH, TEL. 709-738-2065
 FAX. 709-786-4140 NL, AOA 1W0 FAX. 709-738-2066
 e-mail: info@newlabengineering.ca

PROVINCE OF NEWFOUNDLAND AND LABRADOR

PEG PERMIT HOLDER
 This Permit Allows
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 To practice Professional Engineering in Newfoundland and Labrador.
 Permit No. as issued by PEG 020209, which is valid for the year 2017.

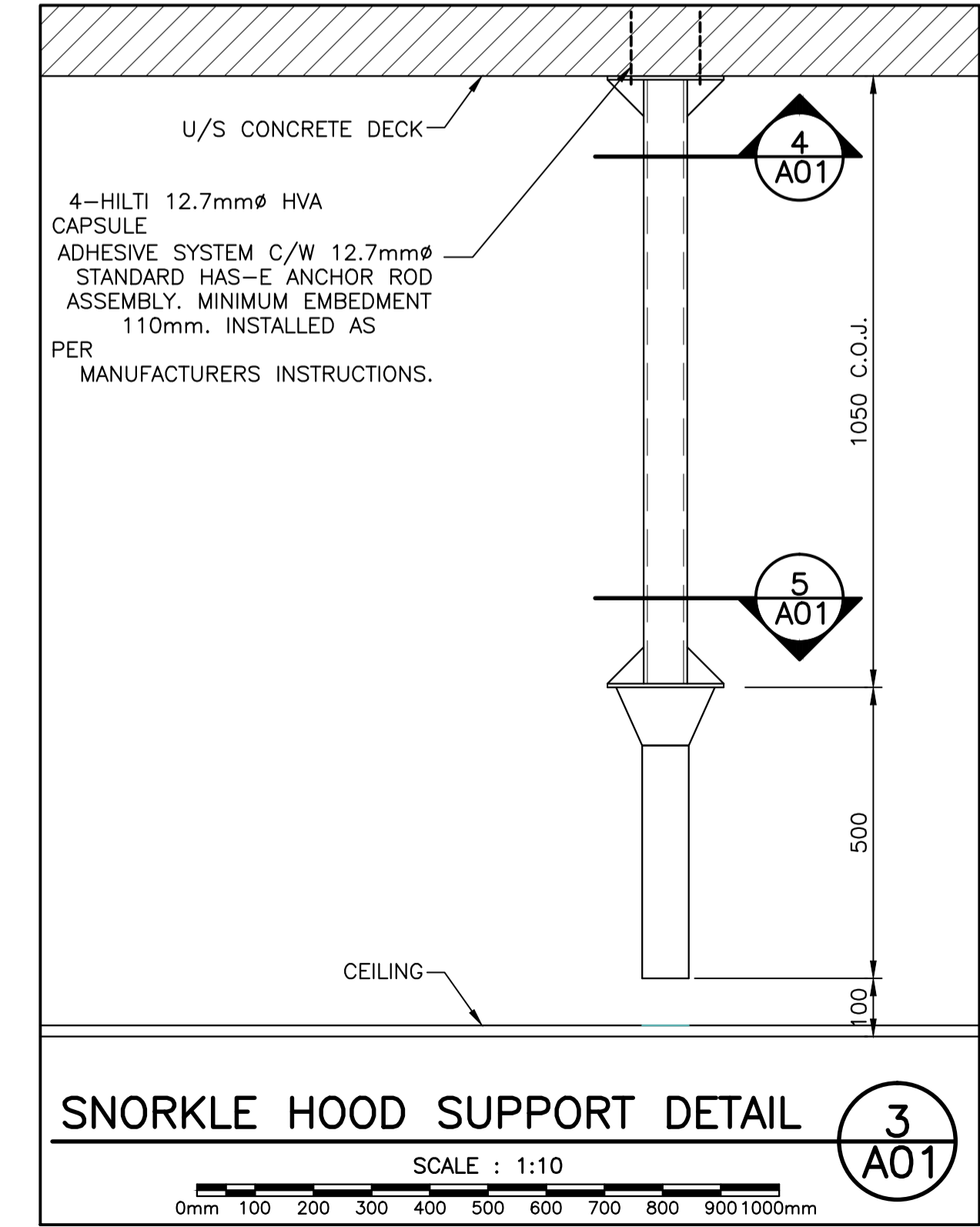
CEILING DEMOLITION PLAN SCALE : 1:50



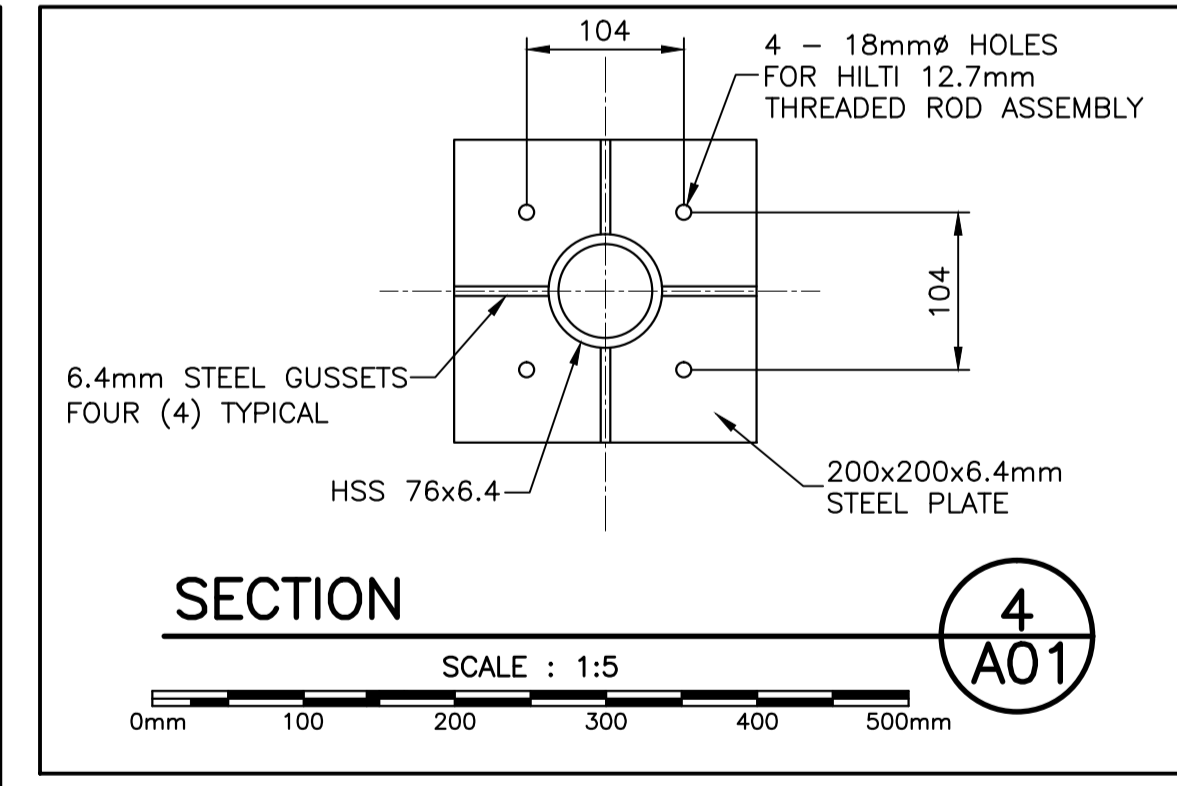
REFLECTED CEILING PLAN - NEW CONDITIONS SCALE : 1:50

STEEL NOTES:

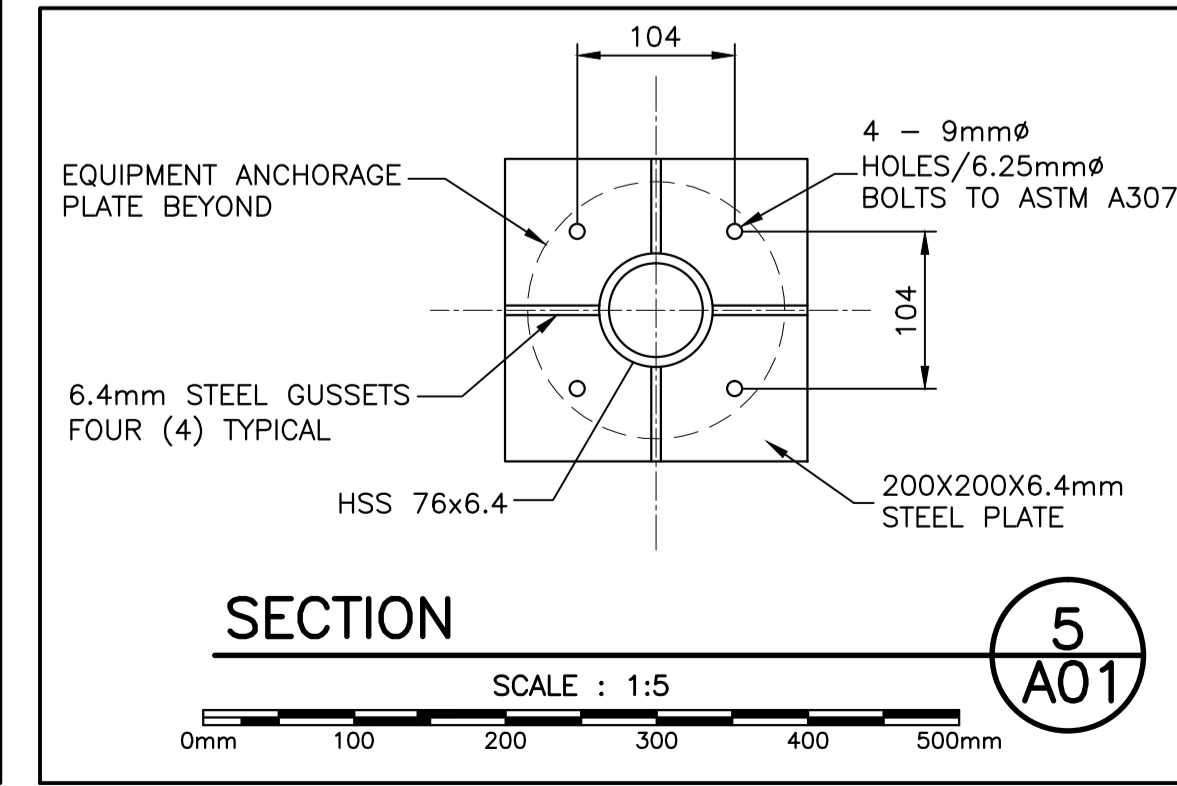
- DESIGN, FABRICATION AND ERECTION TO CAN/CSA S16-14, CSA S136-16. WELDING TO CSA W59-M13.
- STRUCTURAL STEEL TO CSA G40.21 350W.
- STRUCTURAL STEEL FABRICATOR AND ERECTOR CERTIFIED TO CSA W47.1-09.
- ALL BOLTS TO ASTM A307M SPECIFICATIONS.
- WELDING TO CSA STANDARD W59.1. FABRICATOR QUALIFIED IN ACCORDANCE WITH CSA STANDARD W47.1.
- WELDING ELECTRODES TO CSA STANDARD W48-14 MILD STEEL COVERED ARC-WELDING ELECTRODES.
- SHOP PAINT TO CISC/CPMA 1-73a.



SNORKLE HOOD SUPPORT DETAIL SCALE : 1:10

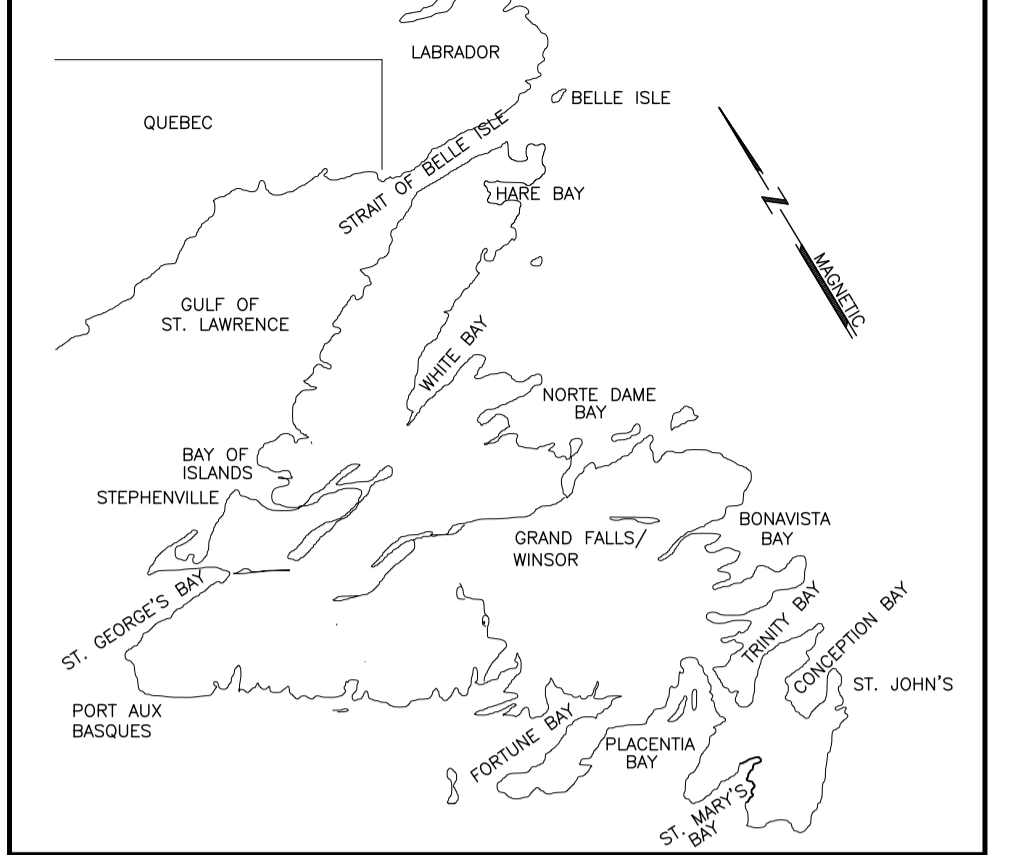


SECTION 4 A01 SCALE : 1:5



SECTION 5 A01 SCALE : 1:5

RO	ISSUED FOR TENDER	DEC/19 2017
revisions		date
project		projct
NAFC P-18 SNORKEL HOOD EXTENSION		
drawing		dessin
PLANS AND DETAILS		
designed	R.B./A.G.	conçu
date	OCTOBER 2017	
drawn	S.L.	dessiné
date	DECEMBER 2017	
approved	A.G.	approuvé
date	DECEMBER 2017	
Tender		Soumission
PWGC Project Manager	Administrateur de projets TPSCG	
project number	F6879-179230	no. du projet
drawing no.	01N1009A090A01	no. du dessin



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 MECHANICAL & ELECTRICAL CONSULTANT
 57 PIPPI PLACE ST. JOHN'S, NL CANADA A1B 4H8
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SUB CONSULTANT
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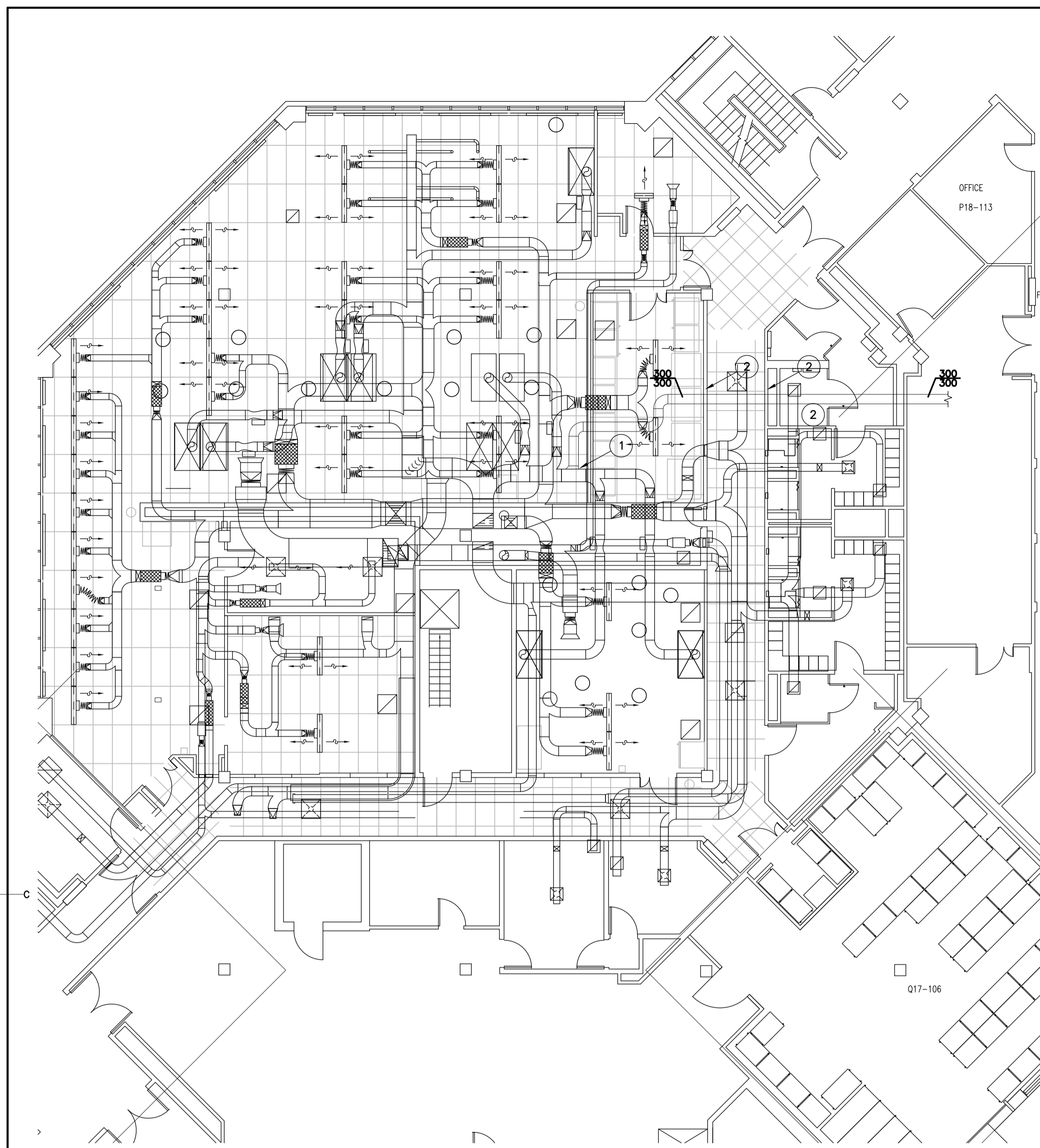
RD	ISSUED FOR TENDER	DEC/19 2017
revisions		date

project NAFC P-18 SNORKEL HOOD EXTENSION

drawing NAFC P-18 SNORKEL HOOD EXTENSION

designed B.E. conçu
 date OCTOBER 2017
 drawn S.D. dessiné
 date OCTOBER 2017
 approved B.E. approuvé
 date OCTOBER 2017
 Tender Soumission

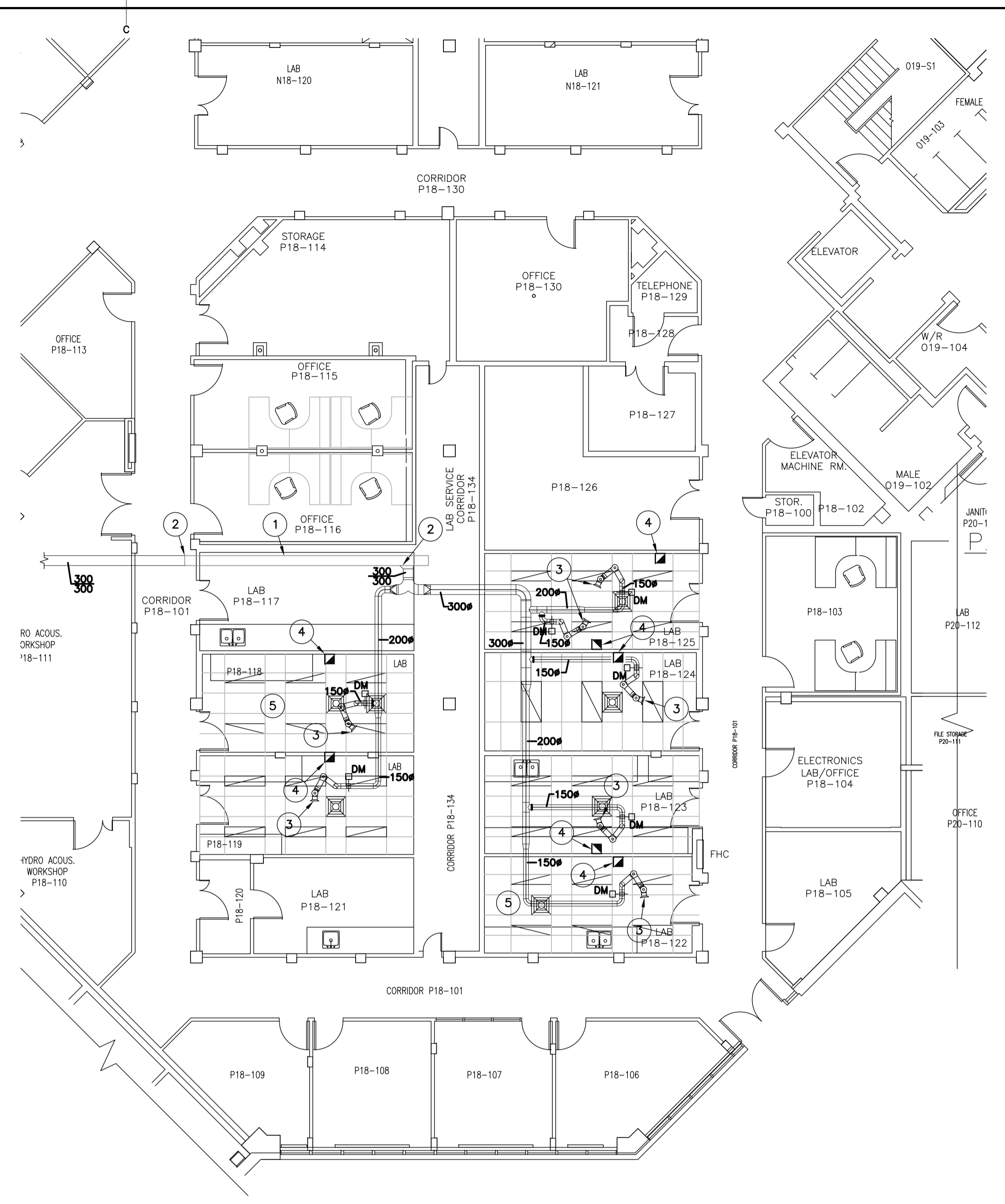
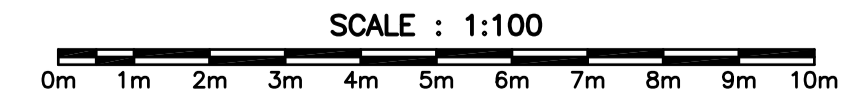
PWGSC Project Manager Administrateur de projets TPSC
 project number no. du projet
F6879-179230
 drawing no. no. du dessin
01N1009A090H01



- DRAWING NOTES:**
- CONNECT NEW EXHAUST AIR DUCT TO EXISTING IN THIS APPROXIMATE LOCATION. EXACT LOCATION TO BE DETERMINED ON SITE.
 - PROVIDE REQUIRED ACCESS HATCHES TO INSTALL AND ACCESS DUCTWORK BOTH THROUGH CEILINGS AND AT WALL PENETRATIONS.

- GENERAL NOTES:**
- WORK SCHEDULE SHALL BE APPROVED BY OWNER. AFTER HOURS WORK WILL BE REQUIRED AS NOT TO INTERRUPT THE NORMAL OPERATION OF THE BUILDING.
 - CONTRACTOR SHALL BE RESPONSIBLE TO COVER ALL EXISTING EQUIPMENT DURING WORK AND CLEAN UP AT THE END OF EACH WORK DAY. WORK SPACE SHALL BE CLEANED TO "LIKE FOUND" WORK CONDITIONS.
 - ALL DUCTWORK SHALL BE 316 STAINLESS STEEL ALL WELDED DUCT. SPIRAL SHALL BE 316 STAINLESS AS WELL.
 - PRESSURE TEST ALL NEW DUCTWORK INSTALLED. EXISTING DUCTWORK BEING UTILIZED TO SERVE NEW ARMS SHALL BE PRESSURE TESTED AS WELL AND SEALED WHERE NECESSARY.
 - EXISTING LAB VENTILATION SHALL BE UPDATED UTILIZING THE FOLLOWING COMPANIES. BALANCING SHALL BE COMPLETED BY CON-TEST AND EXISTING LAB CONTROL SOFTWARE SHALL BE UPDATED BY REGULVAR. THIS CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT BOTH CONTRACTORS & ALLOW FOR 1 SITE VISIT FROM EACH CONTRACTOR(VISIT FROM EACH CONTRACTOR SHALL BE AT THE SAME TIME) TO COMPLETE THE REQUIRED SOFTWARE UPDATE AND BALANCING.
 - THIS CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE ALL NECESSARY CUTTING AND PATCHING TO INSTALL DUCTWORK AS SHOWN. ANY CUTTING AND PATCHING BELOW CEILING SHALL BE PATCHED AND PAINTED TO MATCH EXISTING. ALL DEMISING WALLS REQUIRED TO BE CUT SHALL BE SEALED FOLLOWING INSTALLATION OF SERVICES.
 - PROVIDE ANY AND ALL OFFSETS REQUIRED TO AVOID EXISTING SERVICES TO ROUTE DUCTWORK IN GENERAL LOCATION SHOWN ON THE PLANS.

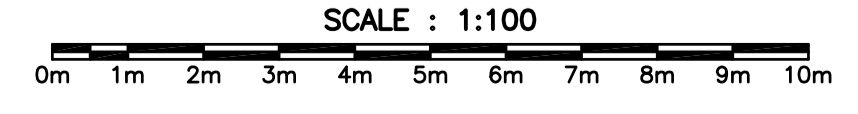
PART FLOOR PLAN - MECHANICAL LAYOUT

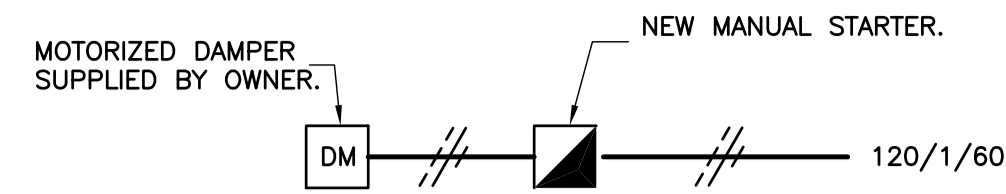


- DRAWING NOTES:**
- EXISTING 300/300 ABANDONED EXHAUST AIR DUCT CAPPED AT BOTH ENDS.
 - CONNECT NEW EXHAUST AIR DUCT TO EXISTING IN THIS APPROXIMATE LOCATION. EXACT LOCATION TO BE DETERMINED ON SITE.
 - NEW ADJUSTABLE OWNER SUPPLIED FUME EXTRACTION ARM MOUNTED FROM SLAB ABOVE. THIS CONTRACTOR SHALL INSTALL FUME EXTRACTION ARMS. EXACT INSTALLATION LOCATION SHALL BE CONFIRMED ON SITE WITH OWNER.
 - NEW DAMPER SWITCH SUPPLIED BY OWNER INSTALLED BY THIS CONTRACTOR. CONTRACTOR TO CONFIRM EXACT LOCATION WITH OWNER ON SITE BEFORE INSTALLATION.
 - EXISTING GYPSUM CEILING SHALL BE REMOVED AND REPLACED WITH NEW. EXISTING GRILLES SHALL BE REMOVED AND LOCATIONS ADJUSTED AND REINSTALLED IN NEW CEILING. PROVIDE ANY ADDITIONAL DUCTWORK, FLANGES ETC SO GRILLES CAN BE INSTALLED IN TBAR.

- GENERAL NOTES:**
- WORK SCHEDULE SHALL BE APPROVED BY OWNER. AFTER HOURS WORK WILL BE REQUIRED AS NOT TO INTERRUPT THE NORMAL OPERATION OF THE BUILDING.
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PART FLOOR PLAN - MECHANICAL LAYOUT



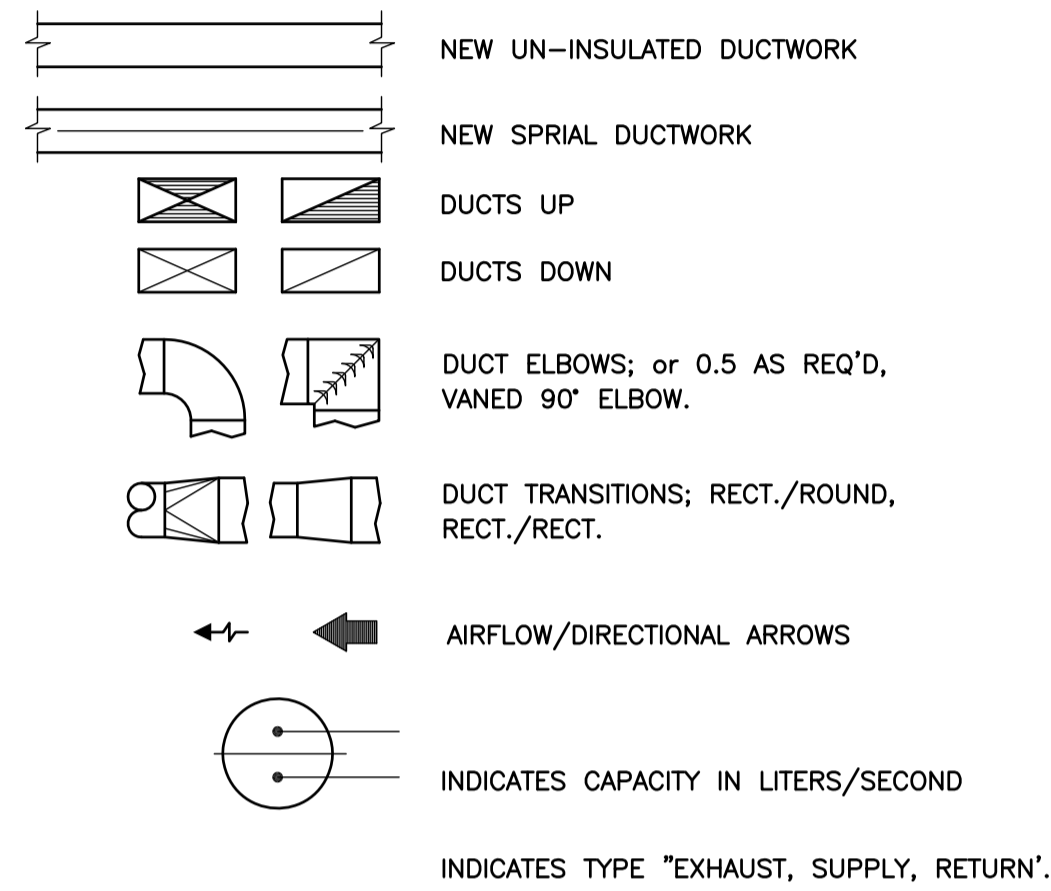


CONTROL SCHEMATIC

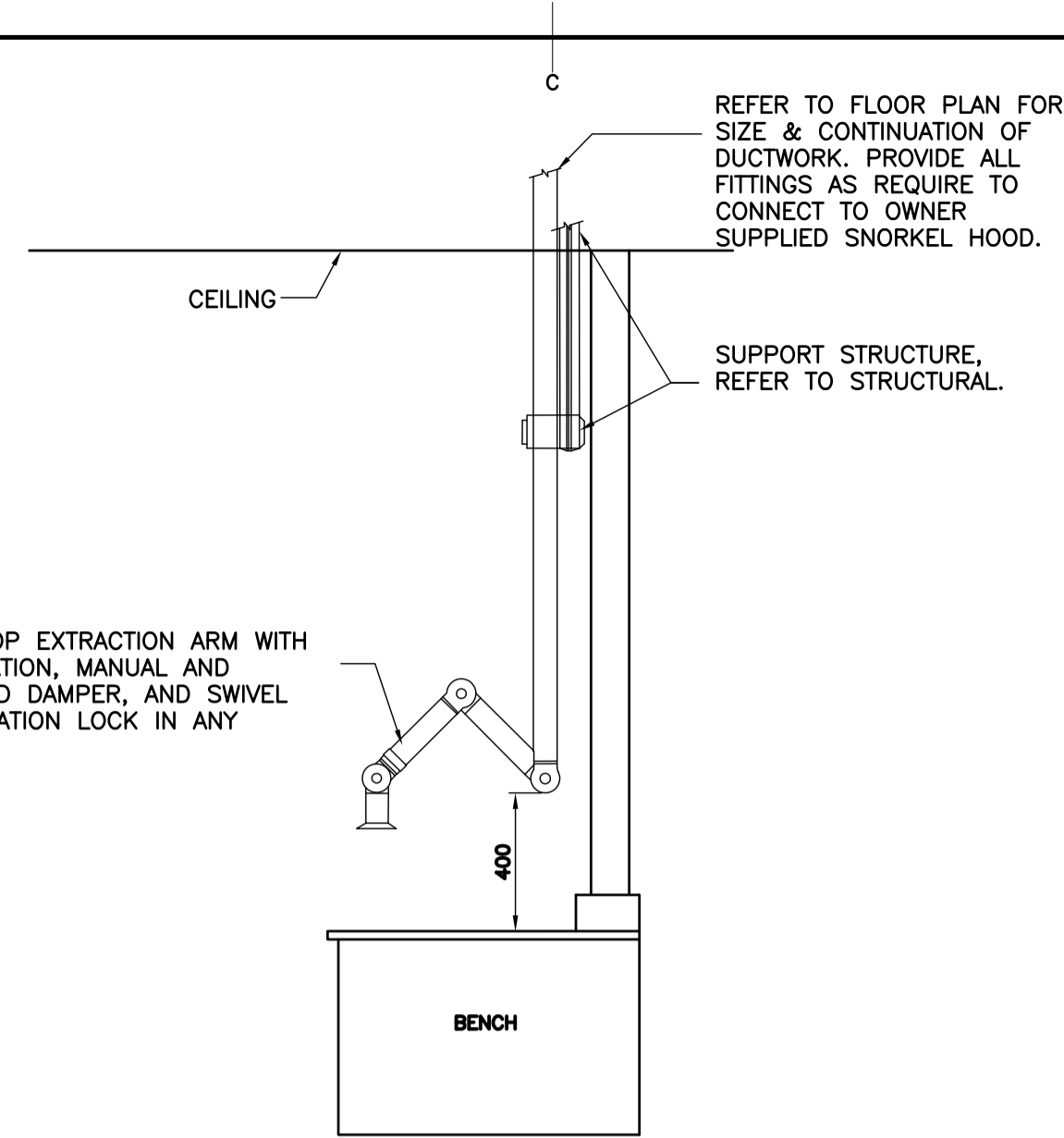
SCALE: N.T.S.

MECHANICAL LEGEND

VENTILATION

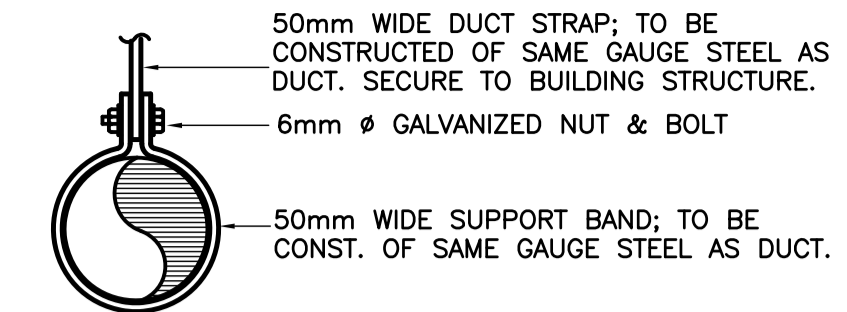
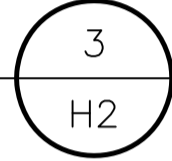


BENCH TOP EXTRACTION ARM WITH 360° ROTATION, MANUAL AND MOTORIZED DAMPER, AND SWIVEL WITH LOCATION LOCK IN ANY POSITION.



EXHAUST ARM DETAIL

SCALE: N.T.S.



ROUND DUCT

50mm WIDE DUCT STRAP: TO BE CONSTRUCTED OF SAME GAUGE STEEL AS DUCT. SECURE TO BUILDING STRUCTURE.

6mm Ø GALVANIZED NUT & BOLT

50mm WIDE SUPPORT BAND: TO BE CONST. OF SAME GAUGE STEEL AS DUCT.

THREADED HANGER ROD : 6mm Ø UP TO 1050mm DUCT 10mm Ø OVER 1050mm DUCT

STEEL ANGLE 25x25x3mm UP TO 750mm DUCT 40x40x3mm UP TO 1500mm DUCT 50x50x3mm OVER 1500mm DUCT SEE SPEC.

0.76mm GALV. SHEET METAL BANDS, 50mm WIDE. SECURE TO BUILDING STRUCTURE

SHEET METAL SCREW C/W WASHER, SPACE AS SHOWN

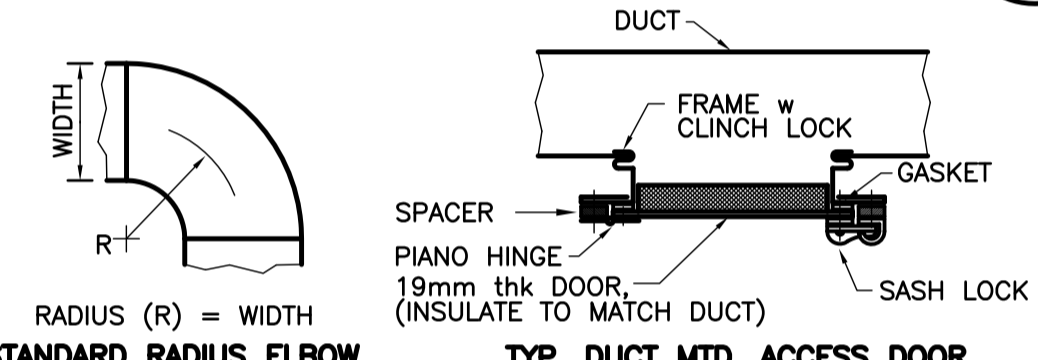
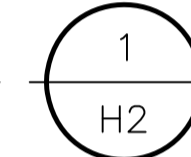
25mm

RECTANGLE DUCT (UP TO 300mm)

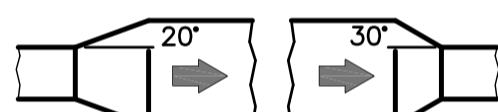
NOTE: ALL HANGER RODS TO BE SECURELY FASTENED TO BLDG. STRUCTURE.

TYP. DUCT SUPPORT DETAILS

SCALE: N.T.S.

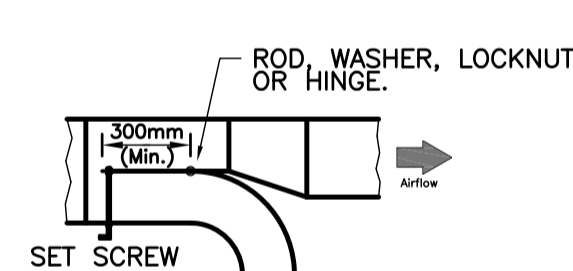


STANDARD RADIUS ELBOW **TYP. DUCT MTD. ACCESS DOOR**

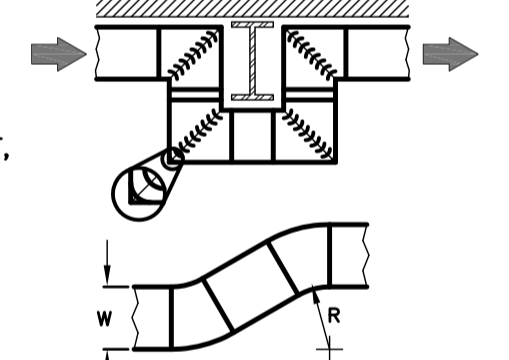


NOTES
20 DEG. Max. ON DIVERGING AIRFLOW,
30 DEG. Max. ON CONVERGING AIRFLOW.

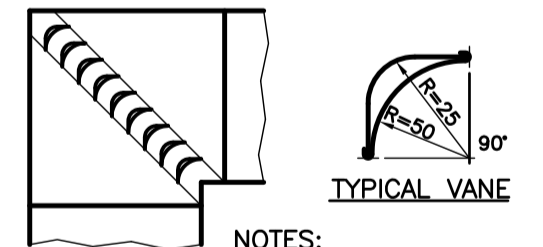
TYPICAL TRANSITIONS



TYPICAL SPLITTER DAMPER

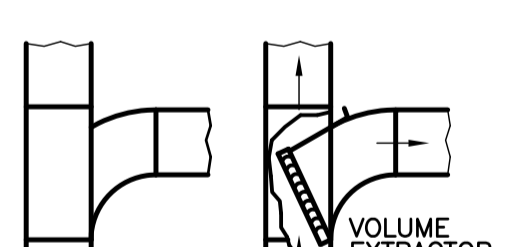


TYPICAL OFFSETS



NOTES:
VANE SPACING,
30mm (SMALL ELBOW)
60mm (LARGE ELBOW)

TYPICAL VANED ELBOWS

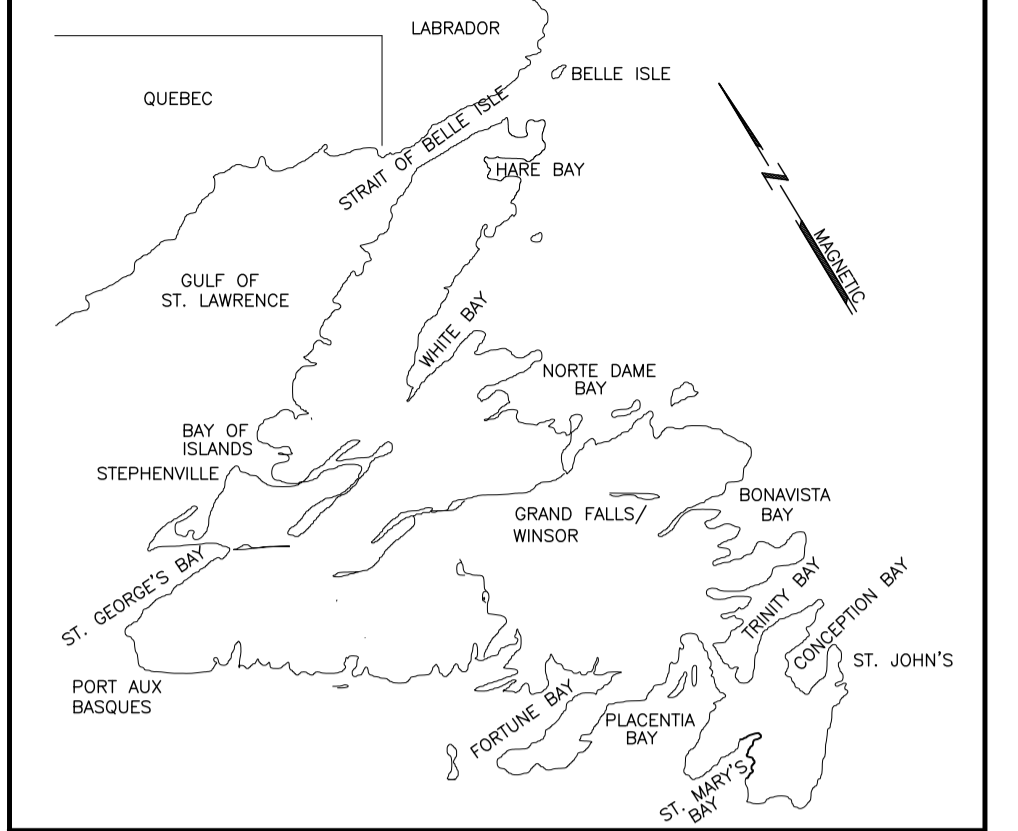
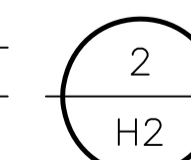


TYPICAL "TEE" CONNECTIONS

NOTES:
1. ALL DUCTWORK CONSTRUCTION SHALL CONFORM TO SMACNA LOW AND/OR HIGH VELOCITY DUCT STANDARDS AS REQUIRED.
2. NOT ALL CONDITIONS SHOWN ABOVE MAY APPLY TO THIS JOB. COORDINATE ON-SITE.

TYP. DUCT CONSTRUCTION STANDARDS

SCALE: N.T.S.



KEY LOCATION PLAN

PRIME CONSULTANT CORE PROJECT #17-2730

CORE ENGINEERING INC.
MECHANICAL & ELECTRICAL CONSULTANT
57 PIPPI PLACE ST. JOHN'S, NL CANADA A1B 4E8
TEL. 709-722-8813 FAX 709-722-0910

SUB CONSULTANT

NEWLAB ENGINEERING LIMITED
CONSULTING ENGINEERS - PROJECT MANAGERS

SOUTH RIVER OFFICE P.O. BOX 400, ST. JOHN'S OFFICE
TEL. 709-786-4446 CLARKE'S BEACH, TEL. 709-738-2065
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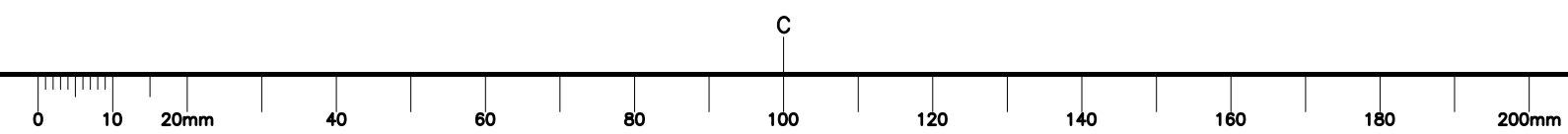
REGISTERED PROFESSIONAL ENGINEER
HAROLD E. FOWLER
DATE: Dec 19/17
PROVINCE OF NEWFOUNDLAND

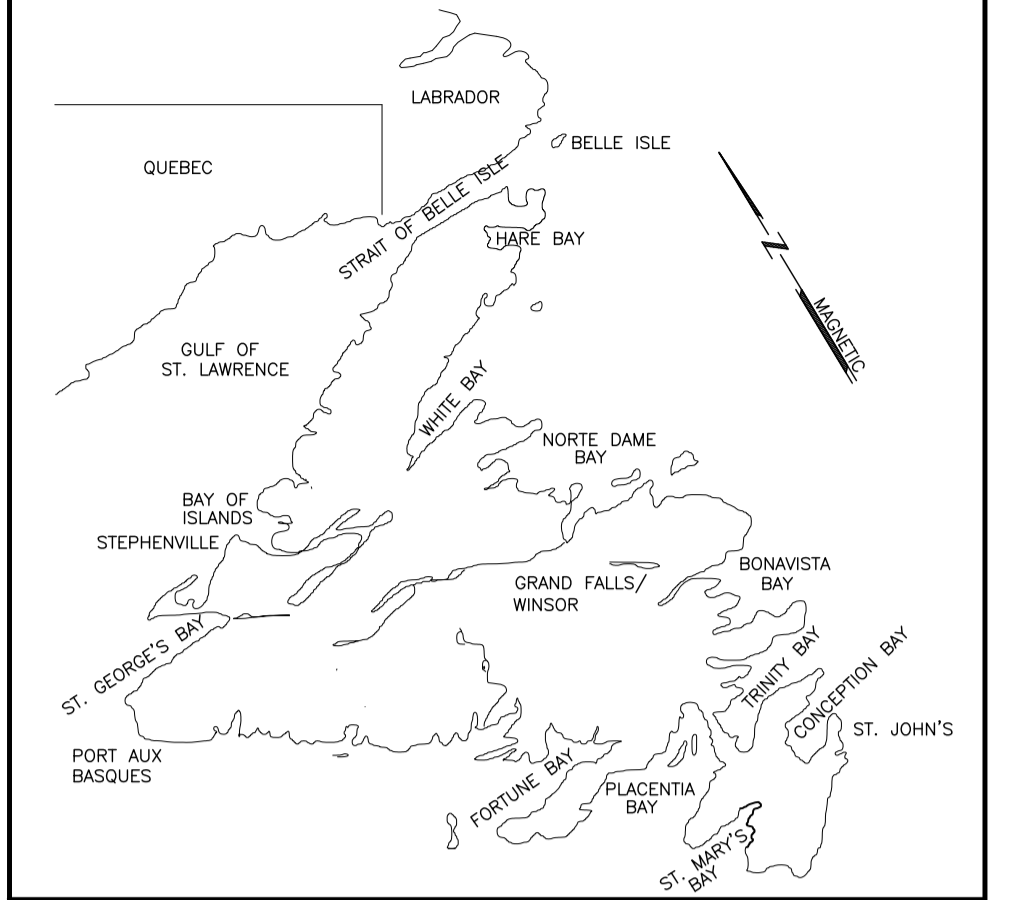
RD	ISSUED FOR TENDER	DEC/19 2017
revisions		date
project		projct

NAFC P-18 SNORKEL HOOD EXTENSION

MECHANICAL DETAILS

designed	B.E.	conçu
date	OCTOBER 2017	
drawn	S.D.	dessiné
date	OCTOBER 2017	
approved	B.E.	approuvé
date	OCTOBER 2017	
Tender		Soumission
PWGSC Project Manager		Administrateur de projets TPSGC
project number	F6879-179230	no. du projet
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COREC
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SUB CONSULTANT

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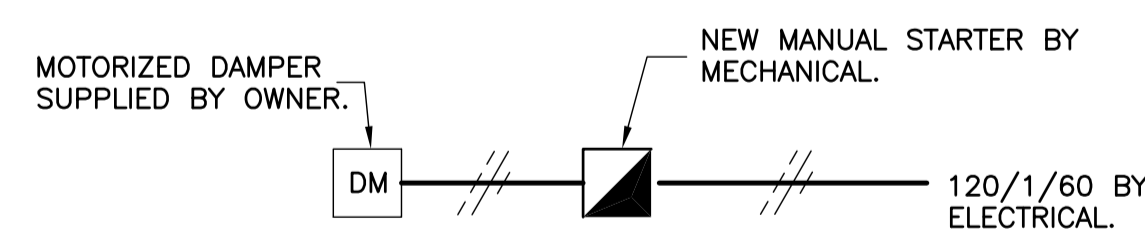
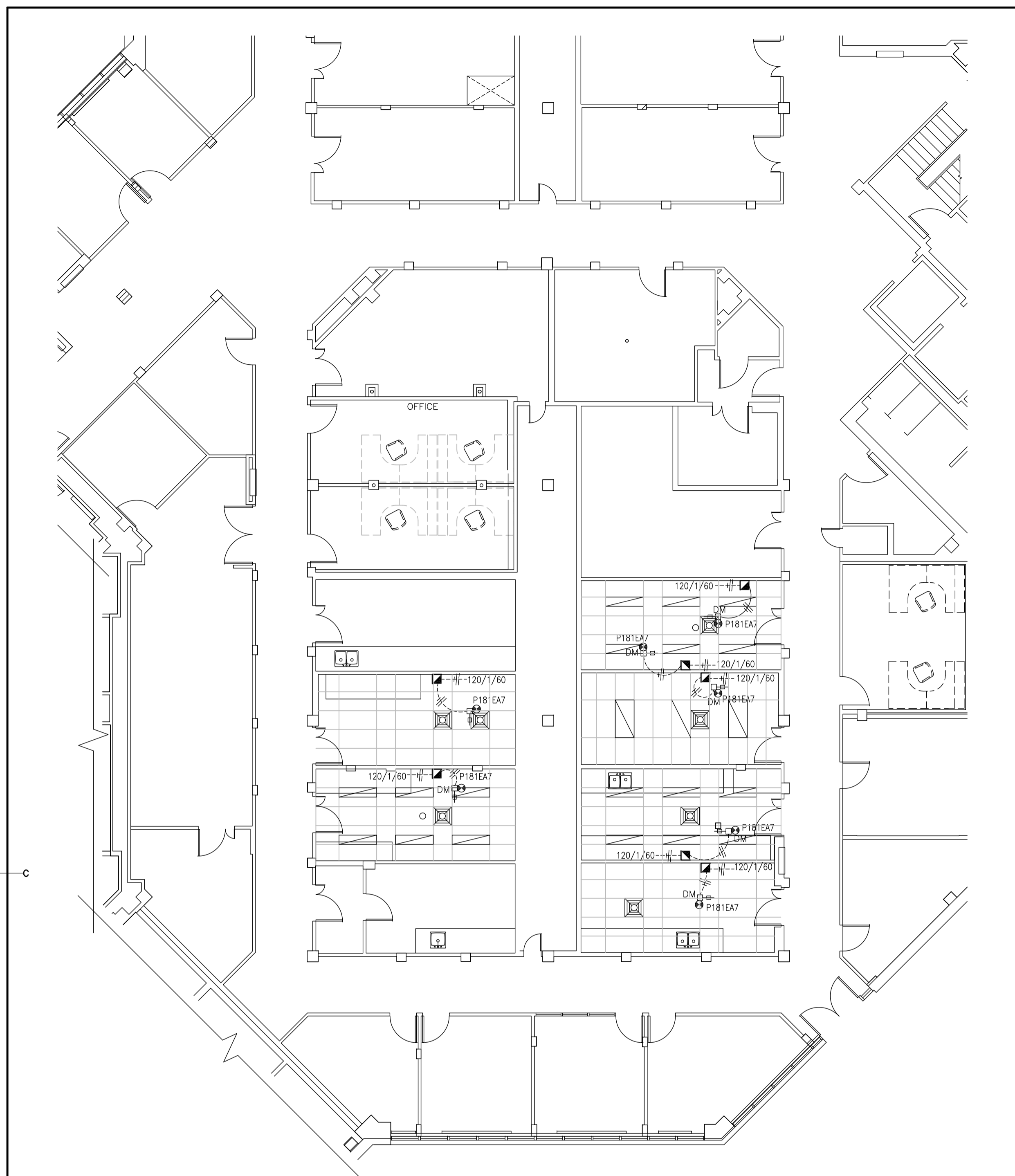
REGISTERED PROFESSIONAL ENGINEER
 GREGORY S. TUCKER
 REGISTRATION 12/19/17
 DATE

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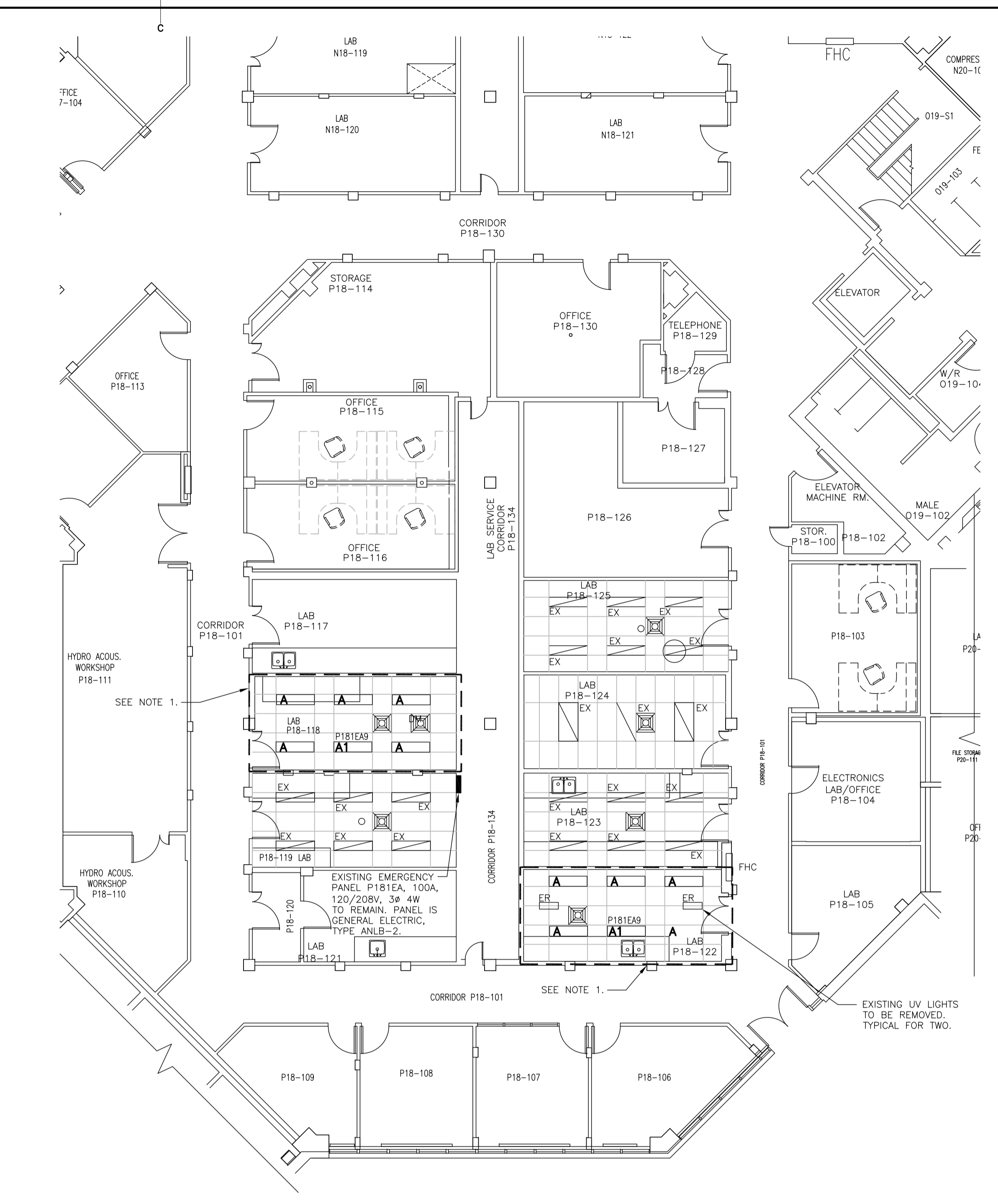
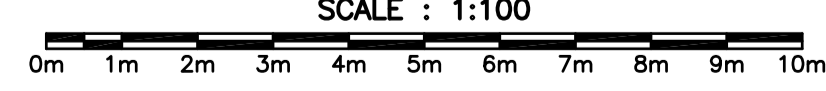
PART FLOOR PLANS - ELECTRICAL AND MECHANICAL LAYOUTS

designed	G.T.	conçu
date	DECEMBER 2017	
drawn	T.B.	dessiné
date	DECEMBER 2017	
approved	G.T.	approuvé
date	DECEMBER 2017	
Tender		Soumission
PWGC Project Manager		Administrateur de projets TPSC
project number	F6879-179230	no. du projet
drawing no.	01N1009A090E01	no. du dessin



CONTROL SCHEMATIC
 SCALE: N.T.S.

PART FLOOR PLAN - MECHANICAL LOADS
 SCALE : 1:100



LEGEND

- EXISTING FLUORESCENT LIGHTING FIXTURE.
 - TYPE 'A' LIGHT FIXTURE TO BE DAY-BRITE #1TG32835-4-FS-02F-347 LED, 3200 LUMENS, 347V. CONFIRM VOLTAGE PRIOR TO ORDERING FIXTURES.
 - EMERGENCY LIGHTING, TYPE 'A1' LIGHT FIXTURE TO BE DAY-BRITE #1TG32835-4-FS-02F-UNV LED, 3200 LUMENS, 120V. CONFIRM VOLTAGE PRIOR TO ORDERING FIXTURES.
 - MANUAL STARTER BY MECHANICAL.
 - ELECTRICAL CONNECTION TO EQUIPMENT.
- SUBSCRIPTS
 EX - EXISTING TO REMAIN.
 ER - EXISTING TO BE REMOVED.

NOTES

1. ALL ELECTRICAL DEVICES LOCATED IN CEILING SPACE TO BE REMOVED AND REINSTALLED UNLESS OTHERWISE INDICATED. ALL EXISTING LIGHTING FIXTURES TO BE REMOVED AND NEW PROVIDED. SEE LEGEND FOR DESCRIPTION. REROUTE/EXTEND WIRING AND CONDUIT AS REQUIRED.
2. CONNECT NEW LIGHTING FIXTURES TO EXISTING LIGHTING BRANCH CIRCUITS AND CONTROLS UNLESS OTHERWISE NOTED. REROUTE/EXTEND WIRING AND CONDUIT AS REQUIRED.
3. REMOVE EXISTING 20A, 2P SPARE IN EMERGENCY PANEL P181EA (P181EA7.9). PROVIDE 1-15A, 1P BRANCH CIRCUIT (P181EA7) FOR POWER TO NEW MOTORIZED DAMPERS. PROVIDE 1-15A, 1P BRANCH CIRCUIT (P181EA9) FOR EMERGENCY LIGHTING. RUN 2-#12 CU RW90 & 1-#12 TW CU BOND IN 21mm EMT CONDUIT. UPDATE PANEL SCHEDULE.

PART FLOOR PLAN - ELECTRICAL LAYOUT

